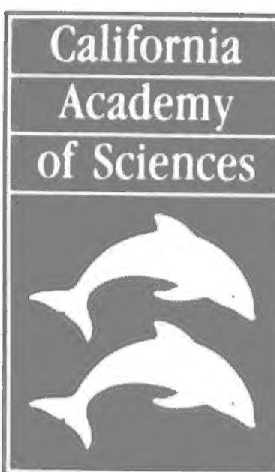
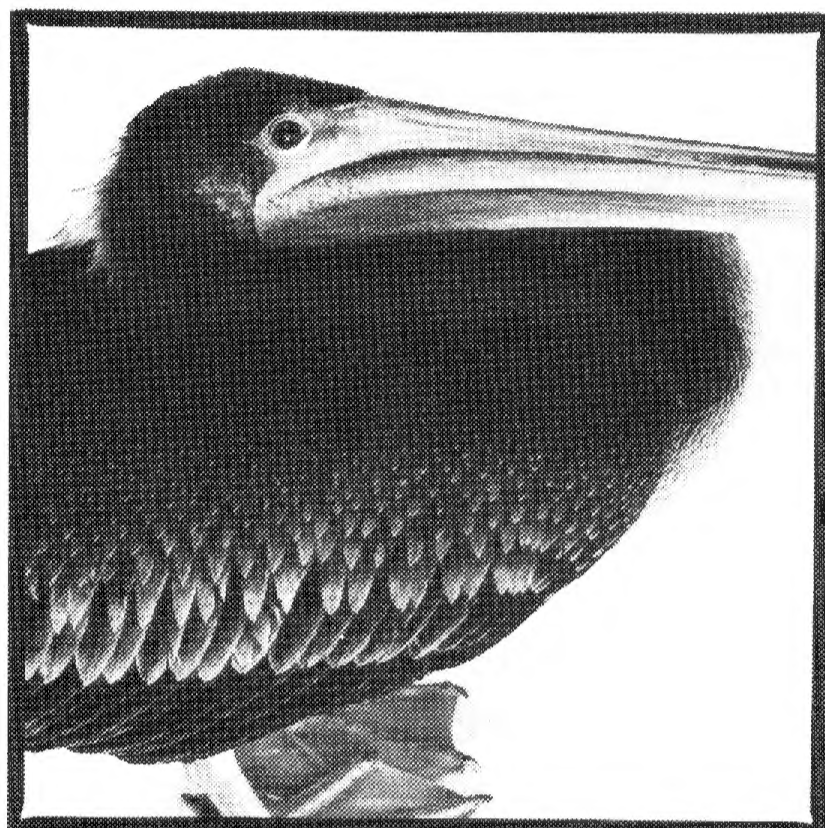


The ACADEMY NEWSLETTER

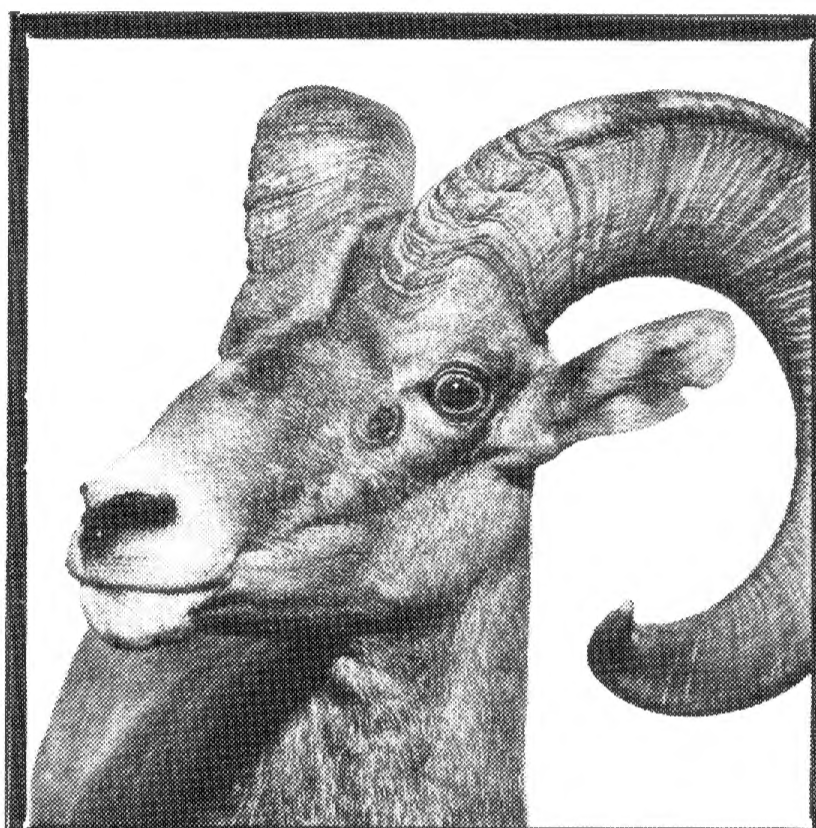
December 1988



Sliding Toward Extinction



Susan Middleton ©1988



Susan Middleton ©1988

The Vanishing Wildlife of California

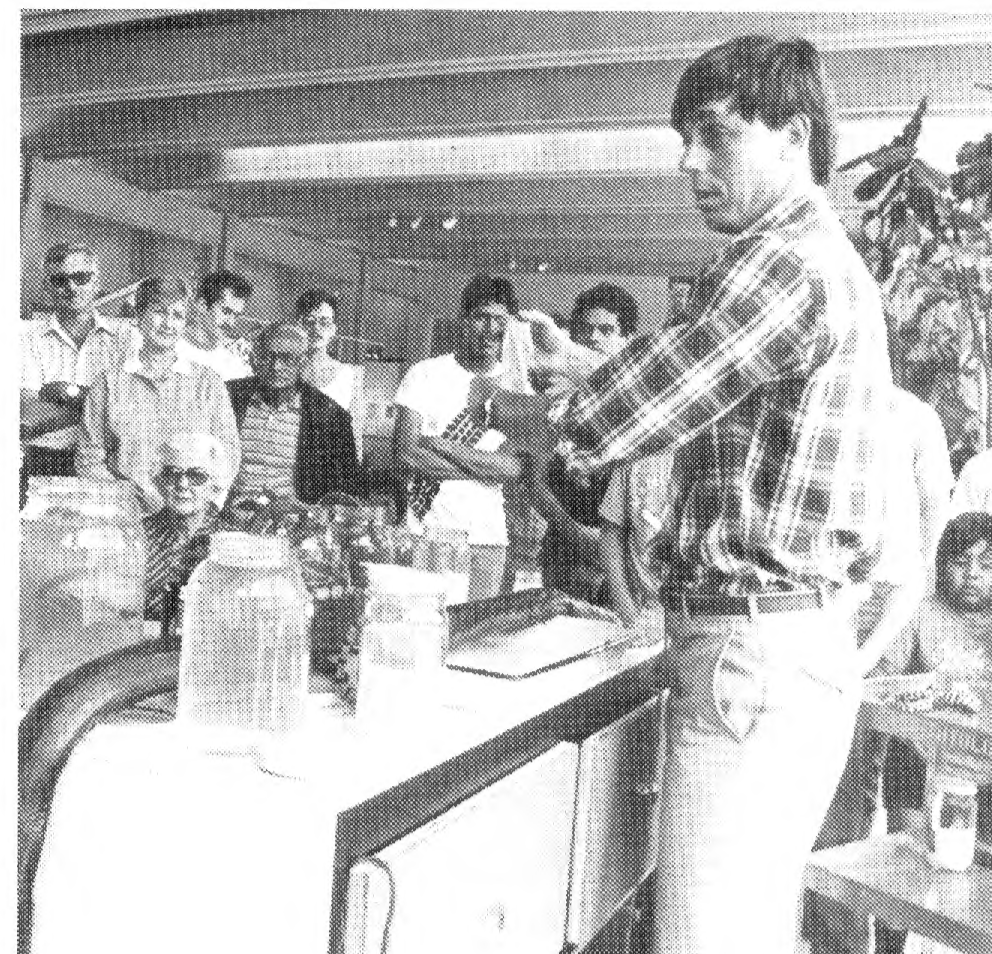
The abundance of plant and animal life in California is something we often take for granted. Within the relatively small geographic region of the state are found more native plant and animal species than in the Northeastern and Central United States combined. In fact, fifty percent of these species are found nowhere else on Earth. On December 17, the Academy is proud to open an exhibition of 25 photographs by Academy photographer Susan Middleton, which captures the beauty and diversity of some of California's natural treasure. Developed by the Academy and the California Nature Conservancy, the show is titled "Sliding Toward Extinction: The Vanishing Wildlife of California."

Each photograph is a finely crafted portrait of one of these endangered species. Middleton isolates each subject against a black background in a large-scale (4' by 4') print, rendering an exquisitely detailed and visually striking image. The impact is a compelling call to action for a major conservation effort in our state.

The stories behind the images are as remarkable as the photographs themselves. So rare are many of these plants and animals that painstaking efforts were taken to find them in their natural environments. In the case of the "K Rat," a small burrowing mammal that looks like a character from Beatrix Potter, it took a team of biologists three nights in the field to locate even one animal to pose for its portrait. To encounter a Golden Trout, California's official freshwater fish, a trek by llama train to 10,000 feet in the High Sierra was required.

Coinciding with the opening of the Academy's new hall of Wild California, "Sliding Toward Extinction" poignantly depicts 25 of the 254 plants and animals already listed as endangered, threatened or rare in California. Of these there are 627 others waiting to be listed. After premiering at the Academy, where it will be on display through May 18, the exhibit will travel throughout the state in an effort to create a public awareness of the need to preserve this natural heritage.

December Members' Meetings



Dr. John McCosker with a "Sea Monster"

Every culture has its own monster myth — Bigfoot, the Yeti, Kraken, Mokele-Mbembe and Nessie. But explorers of the sea have real monsters to contend with. On December 14 at 2:00 and 7:30 p.m. and December 15 at 7:30 p.m., Dr. John McCosker, Director of the Academy's Steinhart Aquarium, gives Members' Meetings on "Sea Monsters: Real or Imagined."

Perhaps it's the fact of the ocean's immensity that gives rise to the idea that monsters inhabit the water. The Great White Shark, the Kraken and the *coelacanth* are only a few of the creatures that have come alive from the briny depths. This year marks the 50th anniversary of the discovery of the living *coelacanth*, one of the most exciting biological finds of the 20th century. Until 1938 the large, flesh-eating *coelacanth* had been thought for centuries to have been extinct. Dr. McCosker will present a slide-lecture about the *coelacanth*, the Academy's Expedition to capture one and what lessons can be learned from 80,000,000 year old creatures.

On January 18 and 19, Dr. George Balazs speaks on sea turtle research in Hawaii.

The Academy Store will be open before and after Dr. McCosker's evening lectures for your holiday shopping convenience. Be sure to bring your membership card for your 10% discount.

Traditional Arts

The Traditional Arts programs offer a first-hand look at the customs of cultures from around the world. All performances take place in Wattis Hall every Saturday at 1:00 p.m.

December 3 — The Westwind International Folk Ensemble interpret Shaker ritual songs and dances. The Shaker religious sect has been fast dwindling in numbers for several decades and this performance is a reconstruction of the original dances, learned by members of Westwind who lived among Shakers and presented with permission from community elders.

December 10 — To get in the Holiday spirit, come and rejoice with us in a Yuletide singalong. The Merrie Olde Christmas Carolers (all members of the San Francisco Opera Chorus) perform traditional favorites from Europe and the U.S., with a few novel arrangements of their own. (Song sheets will be handed out.)

December 17 — Returning for its fourth Christmas concert at the Academy, Deutscher Musik Verein plays a medley of seasonal music from around the world and invites the audience to join in the songs. This year the band also celebrates its 50th anniversary as a performing group in the Bay Area.

Free First Wednesday

The theme for December 7 is the Far Side of Science, and special programs from 5:00 to 9:00 p.m. bring the Far Side of Science Gallery alive with Dr. John McCosker at the Science in Action stage, music at the Far Side Bar by the Redfern Jazz Trio, and art activities with Academy artist Gloria Nusse on creating your own Far Side animals. Light supper will be available.

*The California Academy of Sciences presents
The Claire Matzger Lilienthal Distinguished Lecturer Series*

The Mountain Gorillas of Rwanda

Dr. David P. Watts



Dr. David P. Watts

This year's Claire Matzger Lilienthal lecturer will be Dr. David P. Watts who will share with us his extensive knowledge about the Mountain Gorillas of Rwanda. In his talk, Dr. Watts will draw on his five years of field research and involvement in conservation work at the Karisoke Research Center — the same center that has received international attention for the work of the late Dian Fossey and her associates.

In a non-technical fashion, Dr. Watts will present an overview of Mountain Gorilla behavior and ecology. What do they eat? How do they spend their days? What kind of groups do they live in?

What is the normal life of gorilla like? Most importantly, Dr. Watts will discuss the complexity of these fascinating creatures. Even after 20 years of research, the gorillas continue to surprise us with their detailed behavior and social systems. He will also explain the conservation efforts needed to protect these intelligent creatures and what you can do to contribute. Tickets are available for \$4 for members and \$5 for nonmembers. Please send your check and a self-addressed, stamped envelope to: Lilienthal Lecture, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118. For more information call 750-7222.

Thursday,
January 12
7:30 p.m.

Morrison
Auditorium

A New Look at Trees: A Symposium

"A New Look at Trees," a symposium and workshop at the Academy of Sciences on February 19 and 20, brings together a distinguished group of tree specialists for two days of education and exchange. Co-sponsored by the Academy and the University of California Botanical Garden, the Symposium will cover issues of tree management in urban areas, maintaining tree health through the control of

pests and diseases, trees for dry landscapes and an explanation of new tree biology.

A workshop, "Tree Biology in Practice," features ten hours of continuing education for certified arborists or tree workers approved by the ISA. For further information contact: Tree Symposium, University of California Botanical Garden, Centennial Drive, Berkeley, CA 94720. (415) 642-3343.

American Society of Zoologists Meeting

The California Academy of Sciences is host institution for the 1988 annual meeting of the American Society of Zoologists and several affiliated societies. This will be the largest gathering in many years — as many as 2,000 zoologists are expected to attend. The meetings take place Tuesday through Friday, December 27-30, at the San Francisco Hilton Hotel, and the Academy will host an end of meeting reception.

One of the ways the Academy will be prominent in the meetings is by co-sponsoring two symposia and a workshop. They are "Concepts of Adaptation in Aquatic Animals," "Species and Evolution in Clonal Organisms" and "Science Comes to California." Academy Director of Research Dr. Daphne G. Fautin is co-chairperson of the Local Committee. Several Academy scientists will be presenting the results of their research. The annual session on "Science as a Way of Knowing" will focus on cell and molecular biology. The annual forum is entitled, "The Third Great Extinction: We Have Met the Nemesis and It Is Us."

For more information, including registration details, call Dr. Daphne Fautin at 750-7277.

Lecture Gorillas in Nigeria

The Lowland Gorillas were thought extinct in Nigeria for years, until the early 1980's when rumors reached the outside world that they still exist in the mountain rainforest here — the last stretch of untouched primary rainforest in this nation of 107 million people. On Monday, January 23 at 7:30 p.m., Drs. Kelly Stewart and Sandy Harcourt will discuss this exciting biological discovery in their slide-lecture, "Gorillas in Nigeria." Tickets are \$3 for members and \$5 for non-members. For more information call the Special Programs Office at 750-7129.

The California Academy of Sciences and Film Arts Foundation

Proudly Present

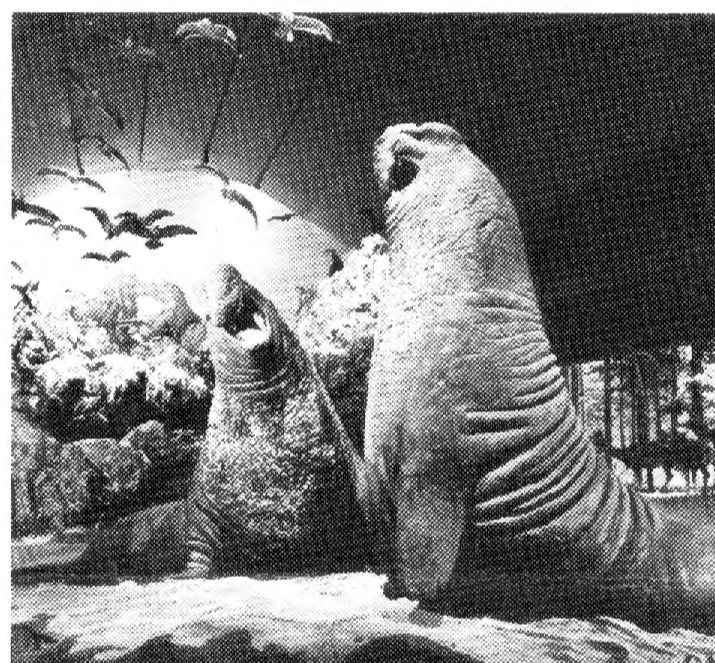
"Treasures of Wild California: Hawks, Seals & Other Things — As Seen By Northern California Filmmakers"

Thursday, February 2 at 7:30 p.m.

Filmmakers In Person



Harris' Hawk



Wild California Elephant Seals

Susan Middleton



The Diminishing Greenbelt

Bob Walker

This program of three short independent works focuses on the disappearing wildlife of the Bay Area and California as a whole. Presented in conjunction with two

important exhibits at the Academy, the new hall of Wild California and Academy photographer Susan Middleton's show "Sliding Toward Extinction," the films offer another perspective on this timely issue. Both exhibits will be open for viewing after the screenings.

Pascale Weimerskirch's documentary "The Harris' Hawk: A Return to the River" traces the reintroduction to California of the Harris' Hawk, a species that became extinct in this state in the 1950s due to man's destruction of its habitat. It is the first film ever made about this splendid animal and what is being done to preserve it.

The plight of "The Northern Elephant Seal: Living on the Edge of Extinction" is considered in this thought-provoking film by Daniel Zatz. The film provides a wonderful way to introduce viewers to the increasingly important subject of genetic diversity.

"Treasures of the Greenbelt" by Judy Irving and Chris Beaver explores the nearly four million acres of parks and watersheds, farms and ranches, forests and vineyards that comprise the unique Greenbelt of the Bay Area.

Ticket Order Form — Treasures of Wild California

Name _____

Address _____

City _____ Zip _____

Daytime phone _____

Enclosed is a check payable to the California Academy of Sciences for:

_____ member tickets at \$3

_____ guest tickets at \$4

Please send this form, your check and a self-addressed, stamped envelope to:

The Special Programs Office
California Academy of Sciences
Golden Gate Park
San Francisco, CA 94118

For more information call 750-7217.

No refunds / No exchanges

Major Gifts to the Academy

The Academy of Sciences is pleased to announce the following major gifts which have been received since July 1, 1988. We are grateful to these Bay Area corporations and foundations who support scientific research, temporary exhibits, special educational projects and our general operating needs.

\$1,000,000

The Paul L. and Phyllis Wattis Foundation

\$100,000

The William and Floar Hewlett Foundation

\$10,000

Chevron, USA

The Walter S. Johnson Foundation

The David & Lucile Packard Foundation

Wilson & Geo. Meyer & Co.

The Dean Witter Foundation

\$5,000

Fireman's Fund Insurance Company Foundation

The Hitachi Foundation

Pacific Telesis Foundation

Northern Trust of California

Roundtree DeMets, Inc.

Levi Strauss Foundation

\$2,500

International Business Machines Corporation

Peat Marwick Main & Co.

RREEF Fund

\$1,000

BankAmerica Foundation

Dodge & Cox

\$500

C & H Charitable Trust

Craftsman Press

Potlatch Foundation

Praxis Media

\$250

Westinghouse Electric

Wired Joint Venture

A New Expedition! Guatemala: Heartland of the Maya

Join us for this members' tour to Guatemala (March 31-April 15) that will highlight a broad diversity of ancient history, magnificent natural beauty and colorful native culture. We will see the most spectacular and important Maya ruins of Guatemala and Honduras.

Participants will explore the famous temples and ceremonial center of Tikal, visit the largest zoomorphic monuments in the Maya world at Quirigua, and see the incredible hieroglyphic staircase in the ancient center of Copan. We will also visit the bustling market town of Chichicastenango in the high-

lands; the peaceful waters at Atitlan, one of the most picturesque mountain lakes in the world; and the churches and residences of Antigua, the old capital of Guatemala. Our guide will be Peter Mathews. An archaeologist currently on staff at the University of Calgary, Dr. Mathews has conducted eight seasons of field work in Guatemala and Mexico. His lectures throughout the tour will add to our appreciation of this fascinating region.

Costs are \$2297 for land and \$663 for airfare. For further information, please call the Academy Travel Office at (415) 750-7222.

Academy Expeditions in 1989!

The Academy's travel program offers adventurous visits to fascinating destinations around the world accompanied by experts whose knowledge adds immensely to the enjoyment and memories of the trip. Enjoy fun-filled days in beautiful locations while learning more about the inspiring world of natural history on an Academy Expedition.

Here's the complete list of new travel adventures:

Baja California

January 7-18

Leader: Dr. James Kelley

Antarctica and the Falkland Islands

January 9-25

Leader: Dr. John McCosker

Tanzania Tenting Safari

January 26-February 11

Leader: Beth Dunbar

Filled — Waiting list only

Guatemala

Heartland of the Ancient Maya

March 31-April 15

Leader: Dr. Peter Mathews

Costa Rica

March 28-April 8

Leader: Dr. Frank Almeda

The Silk Road

April 30-May 24

Leader: Nancy Pickford

Mongolia and Siberia

June 8-July 1

Filled — Waiting list only

Foods of France

June 17-July 2

Leader: Narsai David

Greenland and the Canadian Arctic

July 26-August 9

Leader: Dr. James Kelley

Canada: Prairies and Peaks

August 2-13

Leader: Jacques Gauthier

Caravans of Central Asia:

Samarkand, Tashkent, Bukhara

September 9-22

Namibia and Botswana:

A Safari

September 11-29

Leader: Beth Dunbar

New Zealand, Tasmania, and Australia

September 27-October 17

Leader: Dr. Frank H. Talbot

The Academy Travel Office would be happy to answer questions about these expeditions. For more information call (415) 750-7222.

Old Fourlegs Is Back

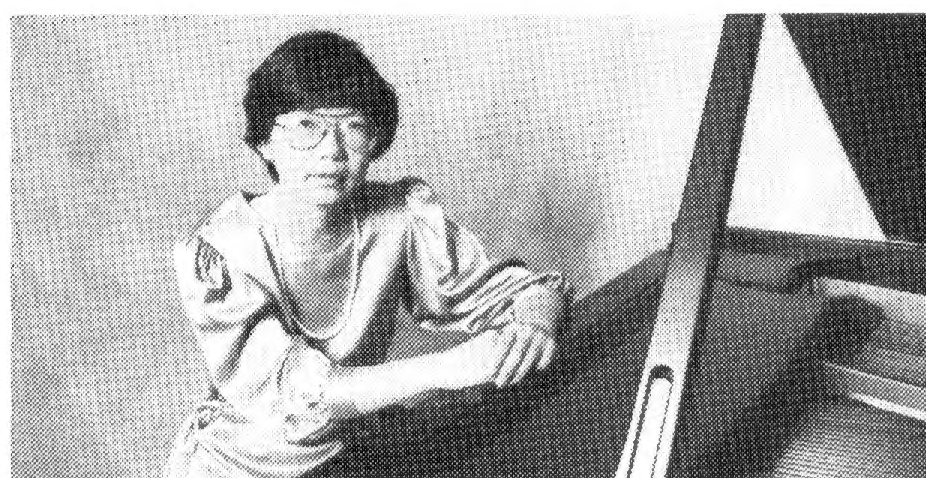
On December 22nd, 1938, a South African fishing trawler captured a large, scaly grey reptilian-looking creature from the briny depths off the Chalumna River. He saved it and brought it to the attention of Marjorie Courtenay-Latimer, then director of the natural history museum in Port Elizabeth, and thus began one of the most exciting scientific quests of the 20th century. Latimer knew that the find was remarkable, and soon the scientific world was startled by the discovery of a living *coelacanth* (pronounced seal'-ah-canth), a creature thought to have been extinct for more than 80,000,000 years! Named *Latimeria chalumnae*, the living coelacanth has been the holy grail of aquarists and scientists who wish to look through its tissues back to the Devonian.

Between November 22nd and January 22nd, the Academy will celebrate the 50th anniversary of the coelacanth's discovery with a display in Cowell Hall. The exhibit will include a rare specimen of a coelacanth, which Academy scientists returned with from Africa during the 1975 American/French Coelacanth Expedition, as well as numerous photographs and items associated with this living fossil.

Young Audiences

On Sunday, December 11 at 1:00 p.m., The Early Morning Brass Quintet takes students on a light-hearted journey from the fugues of Bach to the ragtime of Joplin, covering various musical styles. The program includes a brief introduction to brass instruments and the concepts of melody, harmony and rhythm. This series of lively performances is sponsored by Young Audiences of the Bay Area, Inc., a nonprofit organization with funding from the McKesson Foundation and Grants for the Arts. Performances are free after admission to the museum.

Planetarium Concerts



Pianist Betty Woo

The final concert of the 1988 Fall Concert Series in the Academy's Morrison Planetarium features pianist Betty Woo on Tuesday, December 6 at 8:00 p.m. Acclaimed by critics and composers alike for her interpretation of contemporary music, Betty Woo has performed many world and West Coast premieres of piano works by such composers as Dan Kingman, Richard Swift, Andrew Imbrie and Donald Martino. Born in Hong Kong, Ms. Woo received her training at Mills College, UC Berkeley, Holy Names College and the Royal Academy of Music in London.

Tickets are \$6 for members and \$8 for non-members. To purchase tickets, send a self-addressed, stamped envelope to Morrison Planetarium, Golden Gate Park, San Francisco, CA 94118. For more information call (415) 750-7129.

The Christmas Star Shines in the Morrison Planetarium

Celebrate the coming of Christmas with an annual favorite at the Academy's Morrison Planetarium. The show looks at the beautiful winter night skies which hold brilliant star clusters and nebulae. The fascinating star projector turns its focus to exploring the ancient skies over Bethlehem 2,000 years ago. Was the Christmas star real or a myth? A supernova, a rare comet — what could explain this widely accounted legend? Come and see "The Christmas Star" weekdays from December 2 through January 1 at 2:00 p.m. and on weekends and New Year's Day at 1:00, 2:00, 3:00 and 4:00 p.m. The Planetarium will be closed on Christmas Day.

"Startalk" looks at the phases of the moon, the constellations and what's up in the current night sky from sunset to sunrise. If you can't get outside on a clear night, this is the next best thing to being there! Shows are at noon on Saturdays and Sundays.

Share Your Academy!

Give a Gift Membership that Lasts All Year.



For _____

Address _____

City _____ State _____ Zip _____ Phone _____

Circle one category: Individual \$35 Family \$40 Student \$25 Senior \$20 Senior Couple \$25

Pacific Discovery only \$13 (add \$2 for outside U.S.)

Enclosed is a check payable to the California Academy of Sciences for \$ _____

Or charge by phone on VISA/MC. Call (415)750-7111.

Your name _____ Your phone _____

Please sign gift card as follows _____

Mail to: Membership Office, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118-4599.

584
Time Dated Material
Please Expedite

Golden Gate Park
San Francisco, California 94118-9961
(415) 221-5100

Open daily 10 am to 5 pm



Non-Profit Organization
U.S. Postage Paid
Permit No. 7544
San Francisco

December at the Academy

Continuing exhibitions and shows:

“The Far Side of Science Gallery” permanent
“Dinosaurs From the Life Through Time Collection”
through Summer 1989

- 2 “The Christmas Star” opens in Morrison Planetarium
- 3 Traditional Arts — Shaker songs and dances 1:00 p.m.
- 6 Planetarium concert — Betty Woo 8:00 p.m.
- 7 Free First Wednesday — Far Side
- 10 Traditional Arts — Christmas caroling 1:00 p.m.
- 11 Young Audiences — Early Morning Brass Quintet 1:00 p.m.
- 14 Members’ Meetings — “Sea Monsters” 2:00 and 7:30 p.m.
- 15 Members’ Meeting — 7:30 p.m.
- 17 “Sliding Toward Extinction” — Photographs by Susan Middleton opens
- 17 Traditional Arts — Christmas music from around the world 1:00 p.m.



Holiday gift-giving ideas from the Academy Store. Give this beautiful and colorful tropical fish mug set to that special person on your holiday gift list. With artwork by Pedro Gonzales, each of the four mugs in this set features a wrap-around design of fish from the Academy’s Steinbart Aquarium. This attractiveley boxed gift set sells for \$21.95.

Looking Ahead to January

- 1 Last day of “The Christmas Star” in Morrison Planetarium
- 6 “Skywatch ’89” opens in Planetarium
- 14 Gorilla - Photographs by Nick Nichols opens